

National Jewish Health Asthma ‘Bootcamp’ Improves Rural Pediatric Asthma Care

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DENVER — A pediatric asthma ‘bootcamp’ developed by National Jewish Health to teach pediatricians how to better diagnose and manage asthma, was found to reduce health care use in children with asthma in rural areas. Research published in *The Journal of Allergy and Clinical Immunology: In Practice* showed The Asthma Toolkit Bootcamp program improved physician adherence to current asthma guidelines, leading to fewer hospitalizations, emergency room visits and decreased use of oral corticosteroids among participating practices.

In the United States, approximately 4 million asthma patients live in rural areas. Most of those patients have limited access to specialist care, instead receiving most asthma care in settings where evidence-based asthma care is inconsistently delivered.

For the study, the Asthma Toolkit Bootcamp team from National Jewish Health engaged primary care physicians and practices seeing pediatric patients in rural La Plata County in southwest Colorado to participate in the program. Each practice received online education; a live, interactive, multidisciplinary training workshop (the bootcamp); a spirometer to measure lung function; printed educational materials for patients and in-clinic follow-up one month later to bolster practice change.

“While many conversations of disparity in asthma care center on urban populations, low-income children living with asthma in rural areas also experience gaps in their care,” said Bruce Bender, PhD, co-director of the Center for Health Promotion at National Jewish Health. “Our study shows that with training, guidance and the proper tools, we can make a positive impact in the asthma care of children in rural areas.”

After the training, the number of pediatric patients who received an asthma action plan more than doubled and nearly 90 percent received asthma severity assessments. Primary care physicians who participated in Asthma Toolkit Bootcamp were also roughly three times more likely to measure lung function with a spirometer than before their training.

The adjustments made by the practices to their care methods resulted in remarkable outcomes for their patients, including a 10% decrease in emergency department visits, a 35% drop in hospital admissions and nearly 30% fewer corticosteroids prescribed. The results from the program were captured from 2016 to 2018.

“By engaging rural providers in their community with repeated training and focus on practice change, we can improve asthma care and health outcomes,” said Dr. Bender.

The original Asthma Toolkit program, led by Dr. Bender and funded by the Colorado Department of Public Health and Environment, began in eastern Colorado in 2008. Currently, Dr. Bender is using the Asthma Toolkit to promote improved asthma care within the Navajo Nation.

National Jewish Health is the leading respiratory hospital in the nation. Founded 123 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit the [media resources page](#).

Our team is available to arrange interviews, discuss events and story ideas.

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